

## C l a i m s

1. A method for removing an offshore jacket structure (15) standing on the seabed (16) in a body of water, said method comprising the steps of:

5 (a) providing a ballastable vessel (1) having a main buoyancy section (2) and two auxiliary buoyancy sections (3) located above and on either side of the main section (2), said main section (2) being generally horizontal in the normal floating condition of the vessel (1),

10 (b) bringing said vessel (1) into the vicinity of the jacket structure (15),

(c) ballasting the vessel (1) so as to rotate the main section (2) to an approximately vertical condition and bringing the main section into contact with the jacket structure

15 (15), the auxiliary buoyancy sections (3) now being located on opposite sides of the jacket structure,

(d) securing the vessel (1) to the jacket structure (15) and de-ballasting the vessel so as to raise the vessel with the jacket structure to the water surface (17) while rotating the main section back to the generally horizontal position,

characterised in that in step (c) the main section is at first rotated less than 90° from the horizontal, next it is lowered so that its lower end (11) rests on the seabed (16) adjacent to the jacket structure (15), and whereupon it is rotated beyond 90° into contact with the jacket structure (15) while its lower end (11) is in contact, preferably in substantially rolling contact with the seabed (16).

30 2. A method according to claim 1,

characterised in that in step (d), before raising the vessel with the jacket structure, the auxiliary sections (3) are de-ballasted in order to rotate the vessel (1) with the jacket structure (15) while the lower end (11) of the vessel is substantially in rolling contact with the seabed until the main section (2) of the vessel forms an

angle with the sea surface (17) of 30° - 70°, preferably about 60°.

3. A method according to claim 1 or 2,

5 characterised by using a vessel (1) having in plan view substantially the shape of a delta with an extension (4, 5) at the apex, the extension forming the fore part of the vessel and the base (8, 9) of the delta forming the aft part, the auxiliary buoyancy sections (3) being located at the ends (8) of the base.

10 4. A method according to any one of the preceding claims, characterised by providing the vessel (1) with heavy permanent ballast (12) in the aft part, preferably in the lower parts (8) of the auxiliary buoyancy sections (3).

15 5. A seagoing vessel (1) for removing or installing and transporting an offshore jacket structure (15), said vessel comprising a ballastable main buoyancy section (2) and two auxiliary buoyancy sections (3) protruding on either side of the main section,

20 characterised in that the main buoyancy section (2) is generally planar and has in plan view substantially the outline of an isosceles triangle with an extension at the apex, said extension (4, 5) forming the fore part of the vessel (1) and the base (8, 9) of the triangle forming the aft part, the auxiliary sections (3) being located at the ends (8) of said base.

25 6. A vessel according to claim 5,  
characterised in that a transverse buoyancy section (9) is bridging the gap between the auxiliary buoyancy sections (3), each auxiliary buoyancy section (3) comprising a single column.

30 7. A vessel according to claim 5 or 6,  
characterised in that at least the main

section (2) of the vessel is made from stiffened flat steel plates.

8. A vessel according to claim 5, 6 or 7,  
characterised in that it is provided with  
5 heavy permanent or semi-permanent ballast (12) in the aft  
part, preferably in the lower parts (8) of the auxiliary  
buoyancy sections (3).

9. A vessel according to any one of claims 6-8,  
characterised in that it has a pump room  
10 (10) in the transverse buoyancy section (9) and a control  
room (5) in the fore part.

10. A vessel according to any one of claims 5-9,  
characterised in that it has external sur-  
faces, preferably rounded surfaces (11), at the lower ends  
15 of the auxiliary buoyancy sections (3, 8) configurated to  
permit the vessel, when in use, to pivot towards or away  
from said jacket structure (15) while in contact with the  
seabed (16).